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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO.           | CONFIRMATION NO.  |
|--|-------------|------------------------|-------------------------------|-------------------|
| 09/423,273   | 11/04/1999  | ANTONIUS A.C.M. KALKER | PHN-17.317                    | 6551              |
| 24737  | 7590        | 10/06/2003             |                               |                   |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS<br>P.O. BOX 3001<br>BRIARCLIFF MANOR, NY 10510 |             |                        |                               |                   |
|  |             |                        | EXAMINER<br>SMITHERS, MATTHEW |                   |
|  |             |                        | ART UNIT<br>2134              | PAPER NUMBER<br>5 |
| DATE MAILED: 10/06/2003  |             |                        |                               |                   |

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/423,273

Applicant(s)

KALKER, ANTONIUS A.C.M.

Examiner

Matthew B Smithers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 November 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 5 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-9, and 11-15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 6,427,012 granted to Petrovic.

Regarding claim 1, Petrovic meets the claimed limitations as follows:

“A method of embedding auxiliary data (K) in an information signal (P), comprising the steps of:

shifting one or more predetermined watermark patterns ( $W_2$ ) one or more times over a vector (k), the respective vector(s) being indicative of said auxiliary data (K); and embedding said shifted watermark(s) ( $W_2'$ ) in said information signal.” see column 4, lines 12-59 and column 5, line 27 to column 6, line 59.

Regarding claim 2, Petrovic meets the claimed limitations as follows:

“A method as claimed in claim 1, including the step of further embedding the predetermined watermark ( $W_2$ ) to provide a reference for said vector (k).” see column 4, lines 12-59 and column 5, line 27 to column 6, line 59.

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Regarding claim 3, Petrovic meets the claimed limitations as follows:

"A method as claimed in claim 2, wherein said predetermined watermark pattern ( $W_2$ ) is embedded with a different sign." see column 4, lines 12-59 and column 5, line 27 to column 6, line 59.

Regarding claim 4, Petrovic meets the claimed limitations as follows:

"A method as claimed in claim 1, including the step of embedding a further predetermined watermark ( $W_1$ ) to provide a reference for said vector ( $k$ )." see column 4, lines 12-59 and column 5, line 27 to column 6, line 59.

Regarding claim 6, Petrovic meets the claimed limitations as follows:

"A method of detecting auxiliary data in an information signal, comprising the steps of:

detecting one or more embedded watermarks ( $W_2'$ );

determining a vector ( $k$ ) by which each detected watermark ( $W_2'$ ) is shifted with respect to a predetermined watermark ( $W_2$ ); and

retrieving said auxiliary data from said vector(s)." see column 6, line 60 to column 8, line 51.

Regarding claim 7, Petrovic meets the claimed limitations as follows:

"A method as claimed in claim 6, wherein one of said embedded watermarks is the predetermined watermark pattern ( $W_2$ ), the sign of said predetermined watermark providing a reference for said vector(s)." see column 6, line 60 to column 8, line 51.

Regarding claim 8, Petrovic meets the claimed limitations as follows:

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"A method as claimed in claim 6, including the step of detecting a further embedded watermark ( $W_1$ ) to provide a reference for said vector(s)." see column 6, line 60 to column 8, line 51.

Regarding claim 9, Petrovic meets the claimed limitations as follows:

"A method as claimed in claim 6, wherein the step of detecting an embedded watermark ( $W_2$ ) includes determining the correlation between the information signal and shifted versions of said predetermined watermark ( $W_2'$ ), the vector(s) being defined by the shifted version(s) for which said correlation exceeds a given threshold." see column 6, line 60 to column 8, line 51.

Claim 11 is a means plus function claim for embedding an auxiliary data into an information signal that is substantially equivalent to method claim 1. Therefore, claim 11 is rejected by a similar rationale.

Claim 12 is a means plus function claim for detecting an auxiliary data into an information signal that is substantially equivalent to method claim 6. Therefore, claim 12 is rejected by a similar rationale.

Regarding claim 13, Petrovic meets the claimed limitations as follows:

"A device for recording and/or playing back an information signal, comprising means for disabling recording and/or playback of the signal in dependence upon auxiliary data embedded in said video signal wherein the device comprises an arrangement for detecting said auxiliary data as claimed in claim 12." see column 6, line 60 to column 8, line 51.

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Claim 14 is an information signal claim that is substantially equivalent to method claim

1. Therefore, claim 14 is rejected by a similar rationale.

Claim 15 is a storage medium claim that is substantially equivalent to method claim 1.

Therefore, claim 15 is rejected by a similar rationale.

### ***Allowable Subject Matter***

Claims 5 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 5 and 10, the cited prior art fails to specifically teach wherein the embedded watermark has dimensions less than the dimension of the information signal, and the step of embedding comprises repeating said watermark over the extent of the information signal.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Bender et al (5,689,587) discloses a method for hiding a pattern in a host image.

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B. Tewfik et al (6,442,283) discloses embedding watermark data in multimedia data.

C. Busch et al, "Digital Watermarking: From concepts to Real-Time Video Applications", discloses methods for embedding information into a digital carrier.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B Smithers whose telephone number is (703) 308-9293. The examiner can normally be reached on Monday-Friday (9:00-5:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
Matthew B Smithers  
Primary Examiner  
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